Georgia Poison Center

2017 Annual Report

The Georgia Poison Center is committed to providing high quality poison center services to Georgia healthcare professionals and the residents of Georgia.

Our goal is to deliver prompt and accurate poison information to those who access our services. We continuously strive to:

- Educate residents of Georgia in the areas of poison prevention and first-aid
- Educate Georgia healthcare professionals in the areas of clinical toxicology, poisoning epidemiology, poison prevention, toxicology diagnosis and care
- Provide stable and continuous delivery of quality poison center services to Georgians

The Georgia Poison Center is one of the busiest poison centers in the country, and the only center in Georgia. We are staffed 24 hours a day, 365 days a year by highly skilled physicians, pharmacists, nurses and other poison experts, offering confidential advice on poison diagnosis, treatment, and information.

In 2017, The Georgia Poison Center handled **81,889** incoming calls involving poison emergencies and information.

Of these calls:

- 70,868 calls were due to human poison exposure
- 2,298 calls were due to an animal poison exposure
- 8,733 calls were for general poison information
- 25,207 calls came from healthcare professionals

In addition, 58,093 follow-ups were performed

Georgia Poison Center



Poisonings affect all ages, from infants to seniors.

It should come as no surprise that over **50%** of our calls are about children being poisoned. Some of the reasons include (but are not limited to): curiosity, mobility, hand-to-mouth behavior, imitation, immature taste buds, and look-a-likes.

PATIENT AGE



While children are more often exposed to poisons, adults suffer more serious poisoning injuries and death. This is often a result of: Sedative/hypnotics, antipsychotics, stimulants and street drugs, opioids and alcohol.

Top 10 Substances: All Ages

1. Analgesics = 11.63%	6. Antidepressants =4.55%
(like Motrin® and Tylenol®)	(like Wellbutrin® and Cymbalta®)
2. Cleaning Substances (Household) = 7.15%	7. Cardiovascular Drugs = 4.31%
(like bleach and dish detergent)	(like Lipitor® and Niaspan®)
3. Cosmetics/Personal Care Products = 6.12% (like perfume, shampoo, and toothpaste)	8. Bites and Envenomations = 4.30% (like snakes, spiders, and ants)
4. Sedative/Hypnotics/Antipsychotics = 5.90%	9. Pesticides = 3.48%
(like Valium®, Prolixin®, and Ambien ®)	(like Roundup® and Sevin®)
5. Antihistamines = 4.87% (like Allegra® and Benadryl®)	10. Foreign Bodies/Toys/Miscellaneous = 2.78% (like coins, batteries, and silica gel packs)

Top 5 Substances: By Age

CHILDREN <6 YEARS



ADULTS >19 YEARS



There are several different ways a poison can enter the body. How a person is exposed to a poison is called the "route of exposure". The most common route of an exposure to a poisonous substance is through eating or drinking (ingestion).

Route of Exposure	Number	Percent
Ingestion	56,541	75.49%
Dermal	5,647	7.54%
Inhalation/Nasal	4,572	6.10%
Bite/Sting	3,427	4.58%
Ocular	2,898	3.87%
Other/Unknown	1,816	2.42%

Exposure Reason

Unintentional/Accidental General 48.6% (all unintended exposures that are not listed below) 13.4%Therapeutic Error (wrong dose, wrong person, wrong substance, or incorrect route of administration) 76.5% 5.0% Misuse **Bite/Sting** 4.9% Environmental 2.5% Occupational 1.1%Food Poisoning 0.8% Unknown 0.2% Intentional Suspected Suicide 14%2.7% Misuse 19.3% Abuse 1.7%Unknown 0.9% **Adverse Reaction** 1.9% Drug 2.4%Other 0.3% Food 0.2% Other 0.7% Unknown reason Contamination/tampering 0.6% 1.8% Malicious 0.4%Withdrawal 0.1%

The majority of our calls start in the home setting. However, over one-quarter of our calls came from doctors, nurses and other healthcare professionals seeking treatment advice on a drug or a poisoning related incident.

SITE	Site of Caller	Site of Exposure
Residence	66.12%	89.83%
Workplace	1.08%	1.67%
Healthcare Facility	26.51%	0.30%
School	0.36%	1.48%
Restaurant/Food Service	0.02%	0.25%
Public Area	0.29%	1.15%
Other/Unknown	5.61%	5.32%

A call to the poison center provides a rapid, individualized, cost-effective answer to a poison exposure, and often avoids expensive trips to the emergency department or doctor's office. All of our calls are handled by highly trained, experienced, and dedicated health professionals (such as doctors, nurses, pharmacists, and other poison specialists).

Nearly 2/3 of people who contact us do not need any additional care, and can be effectively managed at home with treatment advice and instructions regarding symptoms of concern. This avoids unnecessary trips to the emergency department and saves Americans billions every year in medical costs and lost productivity.

MANAGEMENT SITE



Patient Therapy & Outcome

Decontamination Techniques	Number
Dilute/Irrigate/Wash	21,145
Food/Snack	3,164
Fresh Air	2,061
Charcoal, single dose	1,693
Cathartic (substance that accelerated the elimination of feces)	921
Other Emetic (induce vomiting)	840
Whole Bowel Irrigation (flushing out the stomach and intestines)	54
Charcoal, multiple dose	30
Lavage	24
(cleansing of a hollow organ)	
(cleansing of a hollow organ) Other Therapies – Top 10	Number
(cleansing of a hollow organ) Other Therapies – Top 10 Fluids, IV	Number 5,085
(cleansing of a hollow organ) Other Therapies – Top 10 Fluids, IV Other	Number 5,085 3,194
(cleansing of a hollow organ) Other Therapies – Top 10 Fluids, IV Other Oxygen	Number 5,085 3,194 1,523
(cleansing of a hollow organ) Other Therapies – Top 10 Fluids, IV Other Oxygen Antibiotics	Number 5,085 3,194 1,523 1,271
(cleansing of a hollow organ) Other Therapies – Top 10 Fluids, IV Other Oxygen Antibiotics Benzodiazepines	Number 5,085 3,194 1,523 1,271 1,098
(cleansing of a hollow organ) Other Therapies – Top 10 Fluids, IV Other Oxygen Antibiotics Benzodiazepines Naloxone	Number 5,085 3,194 1,523 1,271 1,098 984
(cleansing of a hollow organ)Other Therapies – Top 10Fluids, IVOtherOtherAntibioticsBenzodiazepinesNaloxoneSedation (other)	Number 5,085 3,194 1,523 1,271 1,098 984 883
(cleansing of a hollow organ)Other Therapies – Top 10Fluids, IVOtherOtherOxygenAntibioticsBenzodiazepinesNaloxoneSedation (other)Intubation	Number 5,085 3,194 1,523 1,271 1,098 984 883 746
(cleansing of a hollow organ)Other Therapies – Top 10Fluids, IVOtherOtherOxygenAntibioticsBenzodiazepinesNaloxoneSedation (other)IntubationAntiemetics	Number 5,085 3,194 1,523 1,271 1,098 984 883 746 745

Outcome	Number
No Effect	5,069
Minor or Moderate Effect	13,899
Major Effect	1,009
Death	53
No follow-up, nontoxic	2,113
No follow-up, minimal or potentially toxic	45,229
Unrelated effect	2,731
Death, indirect report	10

Education

The Georgia Poison Center is known for being an emergency telephone service that helps those who have been poisoned. It is also known for the education efforts that are put forth to the entire state of Georgia. Our public education efforts are intended to help increase the awareness of poison prevention and to communicate how to reach us for a poison emergency or poison information.

The Georgia Poison Center and partner organizations provided speakers and/or materials for over **200** programs, reaching more than **42,000** people during 2017.

In 2017, the Georgia Poison Center provided 13 emergency preparedness classes to over 300 participants across the state with a targeted audience of physicians, nurses, paramedics, pharmacists, and other health care professionals who are first responders to hazardous incidents. Classes offered included: Advanced Hazmat Life Support (AHLS); Nuclear Plant Emergency Response (NPER); Radiological Preparedness and Emergency Response (RPER); and Explosion & Blast Injuries.

The Georgia Poison Center is also a training site for health care professionals. Emergency medicine and pediatric residents from Emory University School of Medicine train at the Georgia Poison Center on an ongoing basis. During their training, these residents have the opportunity to see how a poison center operates, become familiar with the resources that are available in the center, and assist in consulting on poisoned patients admitted to local health care facilities. Fourth year pharmacy students from PCOM, Mercer University, and the University of the South are also trained here. Students are introduced to the topic of clinical toxicology through oneon-one tutorials and hands-on activities with the guidance of toxicologists and certified specialists in poison information.

Poster Contest

During the third week in March, the Georgia Poison Center celebrates National Poison Prevention Week (NPPW) and coordinates poison prevention activities throughout the state, in collaboration with pharmacies, hospitals, schools, child care providers, and other agencies concerned with the health and safety of their communities.

As part of our celebration of NPPW, we host a statewide poison prevention poster contest to children in grades K-8 to engage the community in helping to ensure the safety of children and adults. The state submissions are judged by Georgia Poison Center staff and forwarded to the National Poison Prevention Week Council for a nationwide poster contest. Each year since 2012, the Georgia Poison Center contestants have won at the National Level, with a record of three 1st place, one 2nd place, and one 3rd place winners.







Selected Research & Publications

- Toxicity of inadvertent benzocaine for oral use exposures in the pediatric population Crystal Proshek, Robert Geller and Stephanie Hon
- A 16-year review of loratadine exposures in the pediatric population Crystal Proshek, Robert Geller and Stephanie Hon
- Survey of common sodium bicarbonate prescribing for tricyclic antidepressant poisoned patients Alexandra King, Stephanie Hon and Adam Pomerleau
- Novel approach to using haloperidol during an active shooter hostage situation Alexandra King, Sara Miller and Alaina Steck
- Aerotoxic syndrome: fuming about fumes while flying the friendly skies George Bachman, Cynthia Santos, Jessica Weiland, Stephanie Hon and Gaylord Lopez
- Tobacco as a source of lead poisoning in a 12-year-old child Tharwat El Zahran, Diane Hindman, Alexandra King, Aaron Ralston and Brent Morgan
- Presence of new psychoactive substances as likely adjuvants formulated in conjunction with LSD: a case report of three patients Tharwat El Zahran and Roy Gerona
- Emergence of a potent synthetic cannabinoid "SGT-78" (4-cyano-cumyl-BUTINACA): a case report - Tharwat El Zahran, Ezaldeen Numur, Roy Gerona, Brent Morgan and Adam Pomerleau
- Cardiac arrest following an acute-on-chronic ingestion of lacosamide Lindsay Schaack, Jami Johnson, Patrick Leffers and Alaina Steck
- Black box or pine box: methylene blue's inherited dilemma George Bachman, Gaylord Lopez and Stephanie Hon



Director Gaylord P. Lopez, PharmD, DABAT

Assistant Director Stephanie L. Hon, PharmD, DABAT

Medical Director Robert J. Geller, MD, FAAP, FACMT

Associate Medical Director Brent W. Morgan, MD, FAAEM, ACMT

Assistant Medical Director Ziad N. Kazzi, MD, FAAEM, FACMT

Assistant Medical Director Melissa Gittinger, MD

Assistant Medical Director Alaina Steck, MD

Medical Toxicologists Toxicology Fellows Specialists in Poison Information (SPIs) Information Technology Staff Data Manager Education Staff Executive Assistants Public Health Professionals

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